Version Description Document

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Approved By: (signature)
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Title: Chief, SED

Responsible Office: 580/Software Engineering Division (SED) **Asset Type:** Template
Title: Version Description Document **PAL Number:** PA 2.6.1.2

Definition	The VDD is the primary configuration control document that is used to track and control software versions released to the testing or operational environments. The VDD provides a summary of the features and contents of the specific software build or release, and identifies the version of the computer software configuration items (CSCIs) that comprise the software build or release. The VDD lists changes to the CSCIs since the last VDD was issued, as well as installation and operating information unique to the version.
Purpose	The purpose is to provide a standardized template for use in producing a Version Description Document for all GSFC software projects. A Version Description Document is required for all deliveries, interim as well as final, to the customer.
Scope	This template is to be used for all GSFC software projects. Such projects may or may not be part of a larger, mission-level project.
Roles and Responsibilities	**Product Development Lead (PDL)** • Responsible for the production of the Version Description Document for all Customer Deliverables as detailed in Section 5.4 of the Software Management Plan / Product Plan (SMP/PP) Boilerplate Tool. NOTE: This tool is stored in the Process Asset Library and is available only to civil servants.
Style Conventions	Text within the template that appears in this (style name = "Normal") style is equally applicable to all Version Description Documents and should be included without modification. All document section headings should also be included without modification, although their style names vary depending on outline level. *Text in this style [style name = "TAILORING ADVICE"] within the template is advice on how to tailor the information in any specific section. As the VDD is developed, the generic [TAILORING ADVICE] text should be replaced with material that applies to the specific software project, or deleted, if it is general advice.*

Version Description Document

Tailoring of this Template	There are 14 sections listed in this template that should be addressed. The PDLs should use their best judgment in determining the applicability of each section for a delivery and they may delete or modify sections based on their applicability to the delivery. For support in tailoring or questions related to tailoring, please reference http://software.gsfc.nasa.gov or someone from the GSFC SPI team.
Note	The entire first three pages of this document should be deleted when producing the Version Description Document. This material is not part of the Version Description Document.

Version Description Document

Change History	Version	CCB Approval Date	Description of Improvements
	1.0	April 20, 2005	Initial approved version by CCB
	2.0	April 28, 2010	Removed the VDD template from the Product Release Letter asset. Added 5 new sections to the VDD template. Removed all project-specific information based on EPG feedback.

[Name of] **Branch**
(NASA GSFC Code xxx)

[Mission Name (Acronym), if applicable**]**

[Software Project Name (Acronym)]

Version Description Document

Version Number: xx

Release Date: yy

Product Development Lead: *[Manager of Project]*

Identification and Organization

This document details the Version Description for the [*software project acronym] [type of software*] Software, Version [*xx*] released on [date of release].

This delivery notice is organized as follows:

Section 1: Features Delivered: identifies the features delivered with this version of the [*type of software*] software.

Section 2: Planned Features Absent from this Version: identifies the features planned for delivery with this version of the [*type of software*] software that are absent, the reason for absence, and planned delivery date.

Section 3:　Assumptions and Dependencies:　describes any assumptions or hardware and/or software dependencies related to this software version, including items such as related COTS, GOTS, or operating systems required to run this version of the software.

Section 4:　Outstanding Discrepancies: identifies open discrepancy reports against this version of the [*type of software*] software, the planned resolution date, and a workaround, if applicable.

Section 5: Disposition of Discrepancies since Previous Delivery: identifies discrepancies closed and change requests included with this version.

Section 6: Significant Changes in Operations: identifies significant changes to operations as they relate to the [*type of software*] software, for example, a change in command arguments.

Section 7:　Inventory of Delivered Items:　lists all software items and documentation delivered with this version of the [*type of software*] software.

Section 8: Applicable Documents: identifies documents applicable to this version of the [*type of software*] software.

Section 9: Software Memory Map: identifies address ranges that were used for this version of the [*type of software*] software.　*[This section is optional].*

Section 10: Build Instructions: identifies instructions required to properly build the system. *[This section is applicable only if source code is being delivered].*

Section 11: Installation Instructions:　identifies instructions required to properly install the system.

Section 12:　De-installation Instructions:　identifies instructions required to properly remove the system.

Section 13:　Configuration Audit: identifies information from the Configuration Audit that was performed for this software, which ensured delivered software was of correct version number with stated functionality.

Section 14:　**Test Results:**　identifies information from the testing activities used to produce this version of the [*type of software*] software.

Guidance: One may elect to create a baseline version, defined through a VDD, without an actual release beyond the implementation team.

1   Features Delivered

This section lists the features delivered in this version of the software and the corresponding requirements satisfied by each feature.

Featured Delivered	External Interface(s) Involved	Requirements

2   Planned Features Absent from this Version

This section lists the features originally planned for this version that are not included. For each undelivered feature, an explanation is given as to why the feature was not delivered, along with a list of the requirements affected by the feature omission and the revised delivery date.

Note: If there are no planned features absent, then delete all except the section title and include the following statement: All planned features were delivered with this version.

Absent Feature	Reason for Absence	Affected Requirement	Planned Delivery
			[*version #*]

3   Assumptions and Dependencies

This section describes the assumptions or dependencies regarding this software version. This includes items such as related COTS, GOTS, or operating systems required to run this version of the software.

4   Outstanding Change Requests and Discrepancies

This section contains a list of Change Requests (CCRs) and Discrepancy Reports (DRs) that are outstanding against this release and identified workarounds, if applicable. This list is complete as of the date of this VDD.

Note: If there are no outstanding CCRs or DRs, then delete all except the section title and include the following statement: There are no outstanding CCRs or DRs with this version.

CCR/DR Number	Component Affected	Feature Affected	Workaround

5   Disposition of Change Requests and Discrepancies since Previous Version

This section lists the changes made to the software since the previous version. For each change, the corresponding list of CCRs and DRs prompting the change is noted, as well as the list of CSCIs affected by the change.

Change Description	Component Affected	Associated CCRs & DRs

6   Significant Changes in Operations

Any operations changes associated with the [*software project acronym*] Software version *[xx]*: are listed below, along with the CCRs and DRs that prompted the change.

Note: If there are no significant changes in operations, then delete all except the section title and include the following statement: There are no significant changes in operations with this version.

Operations Change	Associated CCRs & DRs

7   Inventory of Delivered Items

This table lists the physical material and/or media (e.g., CD-ROM) and associated documentation (hardcopy and/or electronic sources) that comprise this software release. List each item by identifying CSCI number or item name, item location (e.g., disk 1, directory name), and item description.

CSCI Number or Item Name	Location	Description

8   Applicable Documents

The table lists the documents and the document version applicable to this release of the [*software project acronym*] Software. Documents that have been updated with this new release are highlighted in the table below.

Document #	Title	Version	Date

9   Software Memory Map

The Software Memory Map lists address ranges that were used for the [*software project acronym*] Version [*xx*] [*type of software*] Software (executable code and data areas).

[NOTE: This section is optional in nature and may be deleted if not needed. If the section is not needed, then delete all except section title and include following statement: The Software Memory Map is not be supplied with this version.*]*

[Example Memory Map is provided below. Use this map format to provide the values for your software. If you need to make changes to provide a better Map for your project, then modify the map to suit your project.]

[

DRAM Start	**0x80000000**
PMON Data	0x80000000 to 0x8001FFFC
Preserved OS data	0x80020000 to 0x800EFFFC
Performance Log	0x800FF000 to 0x800FFFFC
Applications	0x80100000 to 0x806FFFFC
OS	0x80700000 to 0x80AFFFFC
Scratch	0x80B00000 to 0x8BFFFFFC
DS recorder (SSR)	0x80C00000 to 0x81FFFFFC
DRAM End	**0x82000000**
SRAM Start	**0xB0000000**
SRAM End	**0xB001FFFC**
EEPROM Start	**0xBFC00000**
PMON Code	0xBFC00000 to 0xBFC3FFFC
Mode Manager Code	0xBFC40000 to 0xBFC4FFFC
PROM Code	0xBFC50000 to 0xBFDBFFFC
PROM Tables	0xBFDC0000 to 0xBFDFFFFC
EEPROM End	**0xBFDFFFFC**

]

10   Build Instructions

[*Provide instructions on how to properly do a system build. This should include the required operating systems, assemblers, compilers, profilers, linked libraries (commercial or otherwise), existing software, and delivered software including all version numbers for each of these elements. Include the name of the organization responsible for storing and archiving the source code.*

Include a description of any compiler warnings or errors that are generated when building the software that are considered acceptable. A reason that the error is considered acceptable must be included with the description.

If this information is provided in a separate document, cite the document title and applicable section(s) here.]

[*NOTE: This section is optional in nature and may be deleted if the delivery does not include source code. If the section is not needed, then delete all except section title and include following statement:* Because the delivery does not include source code, Build Instructions are not supplied with this version.*]*

11   Installation Instructions

[*Provide instructions for installing this software version. List any conditions (e.g., environment, hardware, software) that must be met prior to version installation. For example, note if prior versions of the software must be removed before installing the new version. Provide a point-of-contact for consultation should any problems or questions arise during the installation. If this*

information is provided in a separate document, cite the document title and applicable section(s) here.]

12   De-Installation Instructions

[Provide instructions on how remove this software version. If the installation of the new version should fail, explain how the previous version of the software can be restored. Provide a point-of-contact for consultation should any problems or questions arise during de-installation. If this information is provided in a separate document, cite the document title and applicable section(s) here.]

13   Configuration Audit

[Provide information from the Configuration Audit, which was performed for delivery of this version, to show that the correct versions were delivered with the correct functionality. Provide information on how this was accomplished and how the delivered software was verified.]

14   Test Results

[Provide information from the testing activities (i.e., integration, release, system) performed for delivery of this version.   This can simply be a link to the test report, or may include additional information, such as known bugs/anomalies related to the delivered version of the software.]

Appendix A: Acronyms

[List any acronym used within the VDD and its associated meaning.]